UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,846	07/15/2003	Alec Matusis	MDI-101/CIP	8800

30869	7590	09/01/2005	

LUMEN INTELLECTUAL PROPERTY SERVICES, INC.
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EXAMINER
LUI, DONNA V

ART UNIT	PAPER NUMBER
2675	

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE __3__ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *July 15, 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   <u>**Claim 18**</u> is objected to because of the following informalities: Grammatical error

on line 12, should read as: feature from the fixed and discrete location. Appropriate

correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the
> United States before the invention thereof by the applicant for patent, or on an international application
> by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
> title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2.   **Claims 1-6, 10, and 13-18** rejected under 35 U.S.C. 102(e) as being anticipated

by Catherine Topping (Patent No.: US 6,654,484 B2, herein after referred to as

"Topping").

With respect to **Claim 1**, Topping discloses a device for selecting functions (*Figure 4*), comprising:

a memory wherein stored a one to one relationship between two or more fingers of a user and multiple functions, each of the two or more fingers of the user have a different intrinsic finger feature associated therewith, the intrinsic features are features that are natural to the fingers and are not brought about by any modifications to the fingers (*column 3, lines 1-6*); and

a fixed and discrete location is simultaneously associated with the multiple functions, and wherein the selection of desired functions is achieved by the user alternating the different fingers at the fixed and discrete location (*column 4, lines 58-64*), and

a sensor capable of obtaining a finger feature from the fixed and discrete location (*column 3, lines 7-12 and column 4, lines 36-41*).

With respect to **Claim 2**, note the above discussion pertaining to the limitations of **claim 1**.

Topping discloses a device further comprising a means to identify the user (*column 3, lines 59-67 through column 4, lines 1-4*).

With respect to **Claim 3**, note the above discussion pertaining to the limitations of **claim 1**.

Topping discloses a memory comprised of a pre-authorized set of users who are allowed to select one or more of the multiple functions (*column 1, lines 44-52*).

With respect to **Claim 4**, note the above discussion pertaining to the limitations of **claim 1**.

Topping discloses a memory having stored for multiple users different one to one

relationships (*column 1,lines 22-28 and lines 44-52*).

With respect to **Claim 5**, note the above discussion pertaining to the limitations of

claim 1.

Topping discloses a device as set forth in **claim 1**, wherein the device is a mobile

phone (*column 2, lines 32-37*), a computer (*column 1, lines 44-45*), and a device where

the user cannot see the controls (*column 2, lines 13-19*).

With respect to **Claim 6**, note the above discussion pertaining to the limitations of

claim 1.

Topping discloses a device as set forth in **claim 1**, wherein the finger feature

comprises fingerprint data (*column 1, lines 22-28*).

With respect to **Claim 10**, note the above discussion pertaining to the limitations

of **claim 1**. Topping teaches a one to one relationship between the intrinsic finger features

and the multiple functions comprising coordinate data from the fixed and discrete

location of the sensor and wherein the device further comprises a coordinate data analysis

means (*column 5, lines 1-6*). It is inherently known that coordinate data analysis must be

performed in order to determine which function is selected when a single sensor is

divided into a plurality of regions, where each region corresponds to a particular function.

With respect to **Claim 13**, note the above discussion pertaining to the limitations

of **claim 1**.

Topping discloses a sensor comprised of virtual areas (*column 5, lines 1-6*). Each

virtual area is a region of a sensor divided into a plurality of regions.

With respect to **Claim 14**, Topping discloses a method for selecting functions, comprising:

providing a one to one relationship between two or more fingers of a user and multiple functions, each of the two or more fingers of the user have a different intrinsic finger feature associated therewith, the intrinsic features are features that are natural to the fingers and are not brought about by any modifications to the fingers (*column 3, lines 1-6*);

providing a fixed and discrete location is simultaneously associated with the multiple functions (*column 4, lines 58-64*);

alternating between desired functions is achieved by alternating the different fingers at the fixed and discrete location (*column 4, lines 58-64*); and

providing a sensor capable of obtaining a finger feature from the fixed and discrete location (*column 3, lines 7-12*).

With respect to **Claim 15**, note the above discussion pertaining to the limitations of **claim 14**.

Topping discloses a method further comprising identifying the user of the selected finger feature (*column 1, lines 44-52*).

With respect to **Claim 16**, note the above discussion pertaining to the limitations of **claim 14**.

Topping discloses a method further comprising determining whether the user has authorization to actuate the desired function (*column 1, lines 44-52*).

With respect to **Claim 17**, note the above discussion pertaining to the limitations of **claim 14**.

Topping discloses a method further comprising actuating the desired function if the user has been positively identified (*column 1,lines 22-28 and lines 44-52*).

With respect to **Claim 18**, Topping discloses a method for selecting functions by a user wherein the user is operating a device wherein the device is selected from the group consisting of a mobile phone (*column 2, lines 32-37*), a computer (*column 1, lines 44-45*), and a device where the user cannot see the controls while looking through the device (*column 2, lines 13-19*), comprising;

providing a one to one relationship between two or more fingers of the user and multiple functions, each of the two or more fingers of the user have different intrinsic finger feature associated therewith, the intrinsic features are features that are natural to the fingers and are not brought about by an modifications to the fingers (*column 3, lines 1-6*);

providing a fixed and discrete location is simultaneously associated with the multiple functions (*column 4, lines 58-64*);

alternating between desired functions is achieved by alternating the different fingers at the fixed and discrete location (*column 4, lines 58-64*); and

providing a sensor capable of obtaining a finger feature from the fixed and discrete location (*column 3, lines 7-12*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   **Claims 7-9 and 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Topping in view of Yamada et al (Patent No.: US 6,560,612 B1, herein after

referred to as "Yamada").

With respect to **Claim 7**, note the above discussion pertaining to the limitation of

claim 1. Topping teaches the one to one relationship between the intrinsic finger features

and the multiple functions, but fails to relate those features and functions to motion from

the fixed and discrete location of the sensor and wherein the device further comprises a

motion data analysis means.

Yamada teaches a touch pad (*11*) that is operated with a finger (*column 4, lines

23-26*) or pen such that a controller detects coordinate data and executes processing in the

CPU corresponding to the inputted coordinate data (*column 6, lines 59-67*). Although

Yamada uses one discrete area for motion data analysis, many fixed and discrete

locations could have easily been implemented with a plurality of sensors. At the time the

invention was made, it would have been obvious to one skilled in the art to combine the

teachings of Topping and the use of a touch pad comprising motion data analysis, as

taught by Yamada, modifying it in such a way as to relate finger features and multiple

functions of a fixed and discrete location and motion data analysis for the purpose of

obtaining a device capable of selecting more functions, further providing security and

user control. In addition, assigning predetermined functions to various fixed and discrete

locations allows for more functionality of the device, rapid inputting and with reliability

from among many functions without increasing the size of the apparatus (*column 2 lines

23-31*).

With respect to **Claim 8**, note the above discussion pertaining to the limitations of **claim 7**.

Topping teaches an identification system with a hierarchy of security control and controlling functions through fingerprint analysis and fingerprint selection (*column 1, lines 22-28*), where the teachings can easily be implemented into a computer (*column 1, lines 44-45*). Topping fails to teach motion data analysis corresponding to functions of a computer program.

Yamada teaches a touch pad that can be operated with a finger such that functions are controlled through motion data analysis of movements on the touch pad. The motion data is related to functions in a computer program (*column 4, lines 23-39*). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Topping and the use of motion data analysis relating to the functions in a computer program, as taught by Yamada, for the purpose of providing a controlling method which can implement various functions simply and with reliability without increasing the size of the apparatus (*column 1, lines 63-67*), further providing security and user control through fingerprint analysis.

With respect to **Claim 9**, note the above discussion pertaining to the limitations of **claim 7**. Topping fails to teach motion analysis means comprising character recognition. Yamada teaches the use of motion data analysis for function selection and cursor control through the operation of a finger or a pen (*column 4, lines 23-39*). Yamada teaches that through successive function selection a user is able to enter into a pen inputting mode subject to character recognition, where the user can input a hand-written character (*column 9, lines 34-40*). At the time the invention was made, it would have been obvious

to one of ordinary skill in the art to combine the teachings of Topping and motion

analysis means for character recognition, as taught by Yamada, for the purpose of

obtaining an input and function selection device in one that provides security and user

control through fingerprint analysis.

With respect to **Claim 11**, note the above discussion pertaining to the limitations

of **claim 1**.

Topping fails to teach the device comprising a track pad. Yamada teaches a

device comprised of a track pad (*elements 11-13*) performing functions such as a pointing

device and selecting a predetermined function through operation by a finger (*column 2,*

lines 23-31). At the time the invention was made, it would have been obvious to one of

ordinary skill in the art to combine the teachings of Yamada and function selection on a

track pad device, as taught by Yamada, for the purpose of obtaining a device with greater

functionality.

With respect to **Claim 12**, note the above discussion pertaining to the limitations

of **claim 1**.

Topping fails to teach the sensor comprised of a touch screen. Yamada teaches a

sensor comprised of a touch screen (*element 11*) providing the opportunity to perform

functions such as a pointing device and selecting a predetermined function through

operation by a finger (*column 2, lines 23-31*). At the time the invention was made, it

would have been obvious to one of ordinary skill in the art to combine the teachings of

Yamada and function selection on a touch screen device, as taught by Yamada, for the

purpose of obtaining a device with greater functionality.
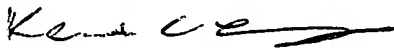
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna V. Lui whose telephone number is (571) 272-4920. The examiner can normally be reached on Monday through Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donna V Lui
Examiner
Art Unit 2675

KENT CHANG
PRIMARY EXAMINER